

Notice of Allowability

Application No.

10/730,238

Examiner

Sanza L. McClendon

Applicant(s)

JING ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/13/2006.
2. ☒ The allowed claim(s) is/are 14 and 19-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 9/05 & 3/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Response to Amendment

1. In response to the Amendment received on February 13, 2006, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claims 1-13, 15-18, and 22-52.

Response to Arguments

2. Applicant's arguments, see Remarks/Amendment, filed February 13, 2006, with respect to claims 1-52 have been fully considered and are persuasive. The rejection of claims 37-52 under 35 USC 102(e) as being anticipated by copending application 2005/0107490 has been withdrawn. The rejection of claims 27-52 under 35 USC 102(e) as being anticipated by copending application 2005/0107488 has been withdrawn. The rejection of claims 27-52 under 35 USC 102(b) as being anticipated by JP 52-052690 to Asawa et al has been withdrawn in view of applicant's cancellation of said claims.

Terminal Disclaimer

3. The terminal disclaimer filed on June 13, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application number 10/712,361; 10/733,211; and 10/712,590 has been reviewed and is accepted.

Allowable Subject Matter

4. Claims 14, 19, and 20-21 are allowed.

5. The following is an examiner's statement of reasons for allowance: The prior art of record, taken alone or in combination, does not fairly suggest or disclose the presently claimed method of making a crosslinked polymer, wherein the steps crosslinking a polymer having a first pendent group (SO₂Cl) and a second pendent group (SO₂X', wherein X' is F or

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OH) and crosslinking said polymer by a process that removes said first pendent group and then converting any remaining second pendent groups to sulfonic acid groups. Nor does the prior art of record disclose the method of making a crosslinked polymer comprising a first pendent group (SO₂Cl) and a second pendent group (SO₂F), crosslinking by a process to remove said (SO₂Cl) groups and then converting said second pendent groups to SO₂Cl groups. Additionally, the prior art of record fails to suggest or disclose the method of making a crosslinked polymer comprising a polymer having a first and a second pendent group and crosslinking by a process of removing said first pendent group; wherein said first pendent group is SO₂H which is converted to a SO₂Cl group before crosslinking. The closest prior art made of record is JP 54-052690 to Asawa et al, which discloses a method of preparing a ion-exchange polymer having a first and second pendent group (I and SO₂X among others, wherein X can be a F, Cl, or others—see entire JP 54/052690) and then crosslinking to form a ion-exchange membrane. However, Awasa et al does not disclose as part of the method converting ion-change groups, Awasa et al starts and finishes with the same ion-exchange moieties (i.e., they are present in the formed polymer and the subsequent crosslinked polymer. Therefore the instantly claimed invention is distinguished over the prior art made of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

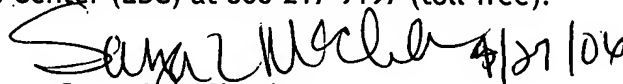
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sanza L. McClendon

Examiner

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